



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/505,467	12/02/2004	Eberhard Teufel	02198/0201733-USO	8882
7278	7590	10/29/2007		
DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER TRUONG, THANH K	
			ART UNIT 3721	PAPER NUMBER
			MAIL DATE 10/29/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/505,467	Applicant(s) TEUFEL ET AL.	
	Examiner Thanh K. Truong	Art Unit 3721	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is in response to applicant's amendment received on August 15, 2007.

#### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the followings features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered:

"wherein the sensors for measuring the mass flows ( $M_1$ ;  $M_2$ ) are coupled with said regulation unit" (emphasis added) in claim 1, lines 11.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 3721

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 7,027,148. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to provide additional sensors to the patent claims.

since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, the recitation "wherein said measuring and regulation unit comprises the sensors for measuring the mass flows ( $M_1$ ;  $M_2$ ) and a regulation unit" (emphasis added) is vague and indefinite, because it is unclear what is the claimed limitation of the phrase "regulation unit comprises ... a regulation unit" (emphasis added).

Claim 1, the recitation "wherein the sensors for measuring the mass flows ( $M_1$ ;  $M_2$ ) are coupled with said regulation unit" (emphasis added) is vague and indefinite, because it is unclear what is being referred to as "are coupled". There is no support to indicate that the sensors are coupled with the regulation unit. Figure 1 shows that the sensors may have been communicated with the regulation unit (via connecting lines), but there is no physical coupling as recited in claim 1.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2-5, 7, 8, 10, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greiner et al. (5,460,590) in view of Möller (5,736,864).

Regarding claims 1 and 2, Greiner et al. discloses an apparatus comprising:

a conditioning section (1), a formatting section (3), and a dosing device integrated into a conditioning section for dosing a softener (column 7, lines 19-22), the device further comprises sensors (46, 49) to detect mass flow, measuring and regulation unit (48).

Greiner et al. discloses the claimed invention, but it does not expressly disclose a plurality of sensors.

However, Greiner et al. in column 7, lines 64-66, stated that: "Optionally the measuring device may comprise an additional measuring means known per se for determining a second characteristic value of the filter skeins" (emphasis added).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Greiner et al. device so that additional sensors are employed to provide means to measure additional characteristic value, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

as discussed above, Greiner et al. discloses the claimed invention, but it does not expressly disclose the sensor located in front of the dosing device.

Möller discloses an apparatus that comprises two sensors in a flow of fibrous material to detect the mass flow and moisture content of the fibrous material flow, to be

used in a filter rod making machine (column 1, lines 6-9). Therefore, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified Greiner et al. so that there are sensors placed in front of and after the dosing device to monitor the mass flow.

The modified Greiner et al. by Möller further discloses:

Regarding claims 3 and 4, Greiner et al. discloses that "Optionally the measuring device may comprise an additional measuring means known per se for determining a second characteristic value of the filter skeins". Therefore, it would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified Greiner et al. so that the sensor that detects the speed and the sensor the detects the length-related mass are arranged directly adjacent to each other.

Regarding claim 5, the formatting device comprises a cutting device (29) and sensor (46) is arranged in front of the cutting device.

Regarding claim 7 and 8, the sensors that detects the length-related mass (Greiner et al.- column 2, lines 58-60) also measure the moisture content of the filter to be measured (Möller – abstract).

Regarding claim 10, the microwave sensor comprises a closed, tube-shaped resonator that is perforated with a plastic probe guide (Möller – column 4, lines 40-45).

Regarding claims 13 and 15, the sensor to detect length-related mass of the filter strand is a beta-radiation source as well as a beta-radiation detector (Greiner et al. – column 8, lines 21-25); and a regulation unit (48) to regulate the filter material and softener mass.

Art Unit: 3721

8. Examiner's note: regarding claims 6 and 14, the Applicant had not properly challenged the Official Notice taken by the examiner (in the Office Action mailed May 15, 2007). In general, a challenge, to be proper, must contain adequate information or argument so that *on its face* it creates a reasonable doubt regarding the circumstances justifying the Official Notice. Since the Applicant fails to properly challenge the Official Notice, the Applicant's right to challenge the Official Notice is waived, and the subject matters recited in claims 6 and 14 are considered as Applicant's admitted prior art.

9. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greiner et al. (5,460,590) in view of Möller (5,736,864) and further in view of the applicant's admitted prior art.

Regarding claims 6, it is old and well known to use optical speed sensors to detect the speed of the flow of the fibrous material.

Regarding claim 14, it is old and well known to use bale scales as a sensor to determining the mass flow of the filter material.

10. Claims 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greiner et al. (5,460,590) in view of Möller (5,736,864) and further in view of the admitted prior art (from the Applicant's disclosure).

As discuss above, the modified Greiner et al. by Möller discloses the claimed invention, Greiner et al. and Möller are silent concerning the limitations as recited in



Art Unit: 3721

the limitations as recited in claims 9, 11 and 12. However, the Applicant's disclosure (specification) discloses the followings are old and well known in the art:

the microwave sensor is a split resonator (page 6, lines 17-33 and page 7, lines 1-9);

the microwave sensor is designed as a planar sensor (page 7, lines 11-15); and

the microwave sensor is designed as a profile sensor (page 7, line 22-26).

Therefore, it would have been an obvious matter of design choice to one having ordinary skill in the art, at the time applicant's invention was made, to have modified Greiner et al. and Möller so that the microwave sensor can be a split resonator, a planar sensor or a profile sensor to provide a variation of microwave sensor as specified in claim 9, 11 and 12.

### ***Response to Arguments***

11. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

12. In response to the applicant's argument that:

*"Combining Greiner with Möller does not render the claimed combinations obvious. Möller is an apparatus for ascertaining the complex dielectric constant of tobacco and has none of the following elements:*

*a conditioning section,*

*a formatting section,*

*a dosing device,*

*a plurality of sensors for independently detecting mass flow of filter tow material and a sum of the mass flow of filter tow material and softener compound,*

Art Unit: 3721

*Rather, Möller has two high-frequency resonators 2, 3 for determining the mass and/or the moisture content of tobacco in a flow of smokable material"*

this is not found persuasive for the following reasons:

Firstly, Möller is relied upon for the teaching of employing sensors that detect the mass flow and moisture content of the fibrous material flow, and the teaching of placing the sensors in front and after of the dosing device.

Secondly, Möller discloses that the sensors are used to detect mass flow and moisture content of the "tested smokable material", and Möller further pointed out that:

*"The flow of smokable material can constitute the rod-like filter of a cigarette rod" (emphasis added) (column 3, lines 23-24).*

### **Conclusion**

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3721

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

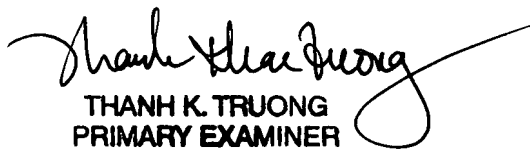
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh K. Truong whose telephone number is 571-272-4472. The examiner can normally be reached on Mon-Thru 8:00AM - 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tkf

October 27, 2007.

  
THANH K. TRUONG  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3700